## STATE OF COLORADO

Bill Ritter, Jr., Governor James B. Martin, Executive Director

Dedicated to protecting and improving the health and environment of the people of Colorado

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Laboratory Services Division 8100 Lowry Blvd. Denver, Colorado 80230-6928 (303) 692-3090 Colorado Department of Public Health and Environment

http://www.cdphe.state.co.us

March 25, 2009

PWSID# CO-0105700 Town of Two Buttes Attention: Rod Steinmetz P.O. Box 10 Two Buttes, CO 81084

Certified Mail Number: 7007 0220 0001 0160 7379

RE: Service of Amendment to Enforcement Order Number: DC-050729-1

Dear Mr. Steinmetz:

The Town of Two Buttes is hereby issued the enclosed amendment to the Enforcement Order (Number: DC-050729-1) that was issued to the Town of Two Buttes on July 29, 2005. This order amendment is issued by the Colorado Department of Public Health and Environment's Water Quality Control Division (the "Division") pursuant to the authority given to the Division by §25-1.5-203 of the Colorado Revised Statutes.

Should you desire to discuss this matter with the Division or if you have any questions regarding the order amendment(s), please don't hesitate to contact Jackie Whelan at (303) 692-3617 or by electronic mail at jackie.whelan@state.co.us.

Sincerely,

Kristi-Raye Beaudin, Legal Assistant

Compliance Assurance and Data Management Section

WATER QUALITY CONTROL DIVISION

cc: Southeastern Land and Environment

Compliance Monitor / Drinking Water File

ec: Dave Knope, Engineering Section, CDPHE

Dick Parachini, Watershed Program, CDPHE

Betsy Beaver, Facility Operators Program, CDPHE

Shawn McCaffrey, EPA Region VIII

Jeff Lawerence, Director Consumer Protection Division, CDPHE

Carolyn Schachterle, OPA

AMENDMENT TO ENFORCEMENT ORDER NUMBER: DC-050729-1 NUMBER ONE

IN THE MATTER OF: TOWN OF TWO BUTTES

PUBLIC WATER SYSTEM IDENTIFICATION NUMBER: CO0105700

**BACA COUNTY, COLORADO** 

Pursuant to the authority vested in the Colorado Department of Public Health and Environment (the "Department") by §25-1-109 and §25-1.5-203 of the Colorado Revised Statutes ("C.R.S."), which authority has been delegated to the Department's Water Quality Control Division (the "Division"), the Division hereby makes the following findings and issues the following Enforcement Order Amendment:

## **GENERAL FINDINGS**

- 1. On July 29, 2005, the Division issued Enforcement Order Number: DC-050729-1to Town of Two Buttes citing violations of the Colorado Primary Drinking Water Regulations for failure to comply with the maximum contaminant levels for combined radium-226 and radium-228. The Enforcement Order is attached hereto as Exhibit A and is incorporated herein by reference.
- 2. After re-evaluating the difficulties associated with the complying with the radionuclides maximum contaminant levels and in coordination with the Division's CORADS initiative, the Division is amending Enforcement Order number DC-050729-1 as follows:

## AMENDMENT NUMBER ONE

- 3. Effective as of the issued date of this Amendment, Enforcement Order Number: DC-050729-1 is therefore amended to revise the Enforcement Order as follows:
  - A. Paragraph 11 is superseded and replaced with the following new paragraph 3(A)(i):
    - i. A review of the radiological monitoring data from June 1, 2003, to present provided to the Department by the System, establishes that the running annual average of samples obtained by the System as required exceeds the maximum

contaminant level of 5 picocuries per liter (pCi/L) for combined radium-226 and radium-228.

	Combined Radium-226+228 (in pCi/L)					
Sampling Point	Compliance Period/Date/Result	Compliance Period/Date/Result	Compliance Period/Date/Result	Compliance Period/Date/Result	Annual Average	
001	Q2 2003	Q3 2003	Q4 2003	Q1 2004		
	06/16/03	07/08/03 and	12/09/03	01/12/04	>9	
	5.7 (radium-226	09/15/03	11	11.6		
	only)	9				
001	Q3 2003	Q4 2003	Q1 2004	Q2 2004		
	07/08/03 and	12/09/03	01/12/04	No sample submitted		
	09/15/03	11	11.6		11	
001	Q4 2003	Q1 2004	Q2 2004	Q3 2004		
	12/09/03	01/12/04	No sample submitted	07/13/04	11	
	11	11.6	*	11.1		
001	Q1 2004	Q2 2004	Q3 2004	Q4 2004		
	01/12/04	No sample submitted	07/13/04	No sample submitted	11	
	11.6	_	11.1			
001	Q2 2004	Q3 2004	Q4 2004	Q1 2005		
	No sample submitted	07/13/04	No sample submitted	03/09/05	11	
		11.1		11.4		
001	Q3 2004	Q4 2004	Q1 2005	Q2 2005		
	07/13/04	No sample submitted	03/09/05	05/03/05	11	
	11.1		11.4	<u>1</u> 1.1		
001	Q4 2004	Q1 2005	Q2 2005	Q3 2005		
	No sample submitted	03/09/05	05/03/05	08/29/05	11	
		11.4	11.1	10.9		
001	Q1 2005	Q2 2005	Q3 2005	Q4 2005		
	03/09/05	05/03/05	08/29/05	11/08/05	11	
	11.4	11.1	10.9	11.1		
001	ANNUAL 2006					
	06/19/06				9	
	8.8					
001	ANNUAL 2007					
	08/01/07				13	
	12.5					
001	ANNUAL 2008					
	01/22/08				12	
	12.2					

- B. The compliance schedule specified in paragraph 23 is superseded and replaced with the following new paragraph 3(B)(i):
  - i. In order to ensure long-term compliance with the maximum contaminant levels for combined radium-226 and radium-228, the Town of Two Buttes shall evaluate and upgrade, as needed, the System's water sources and/or treatment process(es) in accordance with the following schedule:

- a. By April 30, 2009, retain a qualified Professional Engineer (licensed in Colorado and experienced in drinking water systems) to evaluate and recommend radiological treatment technologies or alternate water sources to the Town of Two Buttes to ensure compliance with the maximum contaminant level for combined radium-226 and radium-228.
- b. By October 31, 2009, submit for Department review and comment a finalized Preliminary Engineering Report for system improvements to comply with the maximum contaminant levels for combined radium-226 and radium-228. If an alternate water source is proposed, submit for Department review and comment a detailed description of the alternate water source along with a copy of the laboratory analyses supporting that the alternate water source is suitable.
- c. The Preliminary Engineering Report submittal package must be developed consistent with the Colorado Drinking Water Preliminary Engineering Report Guidance & Review Checklist Form. (see <a href="http://www.cdphe.state.co.us/wq/opa/pdf/19">http://www.cdphe.state.co.us/wq/opa/pdf/19</a> CPERGuideChecklistDW.pdf)
- d. If an alternate water source is proposed, submit for Department review and comment a detailed description of the alternate water source along with a copy of the laboratory analyses supporting that the alternate water source is suitable.
- e. The Preliminary Engineering Report (if applicable) must clearly identify the specific treatment technology the Town of Two Buttes will use to ensure compliance with the maximum contaminant levels for combined radium-226 and radium-228.
- f. The Preliminary Engineering Report (if applicable) must include a process flow schematic of the distribution system from wellheads to points of use, including flow rates, treatment facilities, storage tanks and all service connections supplied by the wells. Alternative treatment locations for the selected treatment process or processes must be evaluated with a recommended location selection. The process flow schematic information and evaluation must be included to ensure all water from the System is treated.
- g. The Preliminary Engineering Report (if applicable) must include a proposal for management of residuals from the treatment technology selected.
- h. The Preliminary Engineering Report submittal package must include design calculations showing the proposed treatment system is properly sized and chlorine contact times can be met for expected flow rates.

{Please note that, prior to construction, the Department must give final approval to any modifications to the System's water source or treatment process. The Department will not perform a detailed review and final approval of any proposed modifications until the final design plans and specifications have been received pursuant to paragraph 3(B)(i)(k) below.}

- i. By February 28, 2010, submit for Department review and comment the final Design Report for the Town of Two Buttes System improvements to comply with the maximum contaminant levels for combined radium-226 and radium-228.
- j. By August 1, 2010, submit Final Design Plans and Specifications for the System improvements for Department review and approval in accordance with the State of Colorado Design Criteria for Potable Water Systems.
- k. The Final Design Plans and Specifications submittal package must include specifications for treatment equipment and/or chemical additives that come in contact with the water that indicate ANSI standards 60 and 61 are met (NSF certification).
- By October 15, 2011, complete construction/implementation of the Department approved System improvements to ensure long-term compliance with the maximum contaminant levels combined radium-226 and radium-228.
- m. By December 1, 2011, submit the Professional Engineer's Certification that the System improvements to comply with the maximum contaminant levels for combined radium-226 and radium-228 were constructed/installed as approved by the Department.
- C. The following new paragraphs are incorporated into Enforcement Order Number DC-050729-1
  - i. By no later than April 30, 2009, the Town of Two Buttes shall complete an evaluation to determine appropriate interim measures to ensure that the System is providing the best possible quality of water available until the System implements improvements to ensure long-term compliance with the radiological maximum contaminant levels. The Town of Two Buttes shall submit a written report of the results of this evaluation to the Division for review and comment. Implementation of the interim measures identified by the Town of Two Buttes shall become a condition of this Enforcement Order unless notified by the Division, in writing, that alternate or additional interim measures are appropriate. If the Division imposes alternate or additional interim measures, they shall also become a condition of this Enforcement Order.

- ii. By no later than March 31, 2009, and every three (3) months thereafter, the Town of Two Buttes shall issue a public notice in accordance with 5 CCR 1003-1, Article 9.2 for each radiological maximum contaminant level violation identified in this Enforcement Order until the Town of Two Buttes has effectively addressed and returned to compliance with the radiological maximum contaminant levels outlined in 5 CCR 1003-1, §2.6, Table 2-7. Within ten (10) calendar days of completion of each required public notification, the Town of Two Buttes shall submit to the Department, along with the mandatory Public Notification certification of delivery, a representative copy of notices distributed, published, posted, and/or made available to the persons served by the system and/or to the media. (Attached are copies of procedures and forms to assist you with the public notification requirements.)
- iii. The Town of Two Buttes shall submit "System Improvement Project Progress Reports" to the Division every ninety (90) calendar days. The first report shall be submitted to the Division by March 31, 2009. At a minimum, each report shall clearly indicate the status of the system improvement project at the time the report is filed and outline activities to be undertaken within the next ninety (90) calendar days. Each report shall also detail any public notification provided during that period. These reports shall be required until the System has effectively addressed and returned to compliance with the radiological maximum contaminant levels outlined in 5 CCR 1003-1, §2.6, Table 2-7.
- iv. All documents submitted under this Order Amendment shall use the same titles as stated in the Order Amendment, and shall reference both the number of the Order, Amendment number, and the paragraph number pursuant to which the document is required.
- D. For all documents, plans, records, reports, and replies required to be submitted by the Order, Town of Two Buttes shall submit an original and one copy (electronic is preferred) to the Division at the following address:

Colorado Department of Public Health and Environment
Water Quality Control Division / WQCD-WQP-B2
Compliance Assurance and Data Management Section / Enforcement Team
Attention: Jackie Whelan
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530
Email: jackie.whelan@state.co.us

(For any facsimile transmittals, please include a cover sheet addressed to Ms. Whelan.)

## SCOPE OF AMENDMENT NUMBER ONE

The scope of this Amendment Number One to Enforcement Order Number DC-050729-1 is limited to the revisions outlined above. All other terms and conditions of the Enforcement Order shall remain unchanged and in effect.

Issued at Denver, Colorado, this 25 day of March, 2009.

FOR THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

Lori M. Gerzina, Section Manager

Compliance Assurance and Data Management Section

Water Quality Control Division